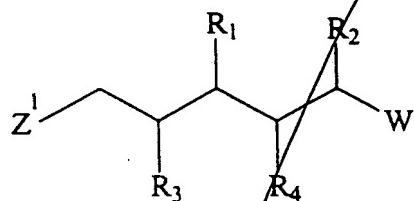


5 WE CLAIM:

- Subj  
B2/10
1. A compound or a physiologically acceptable salt thereof, wherein the compound has the formula:



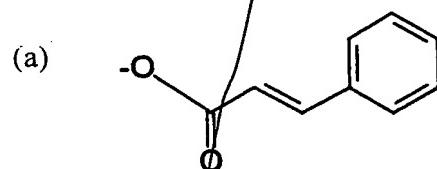
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wherein:

R<sub>1</sub> and R<sub>2</sub> are the same or different and are independently H or R;

- 20 R is a structural fragment having a saturated or unsaturated linear, branched, or cyclic, skeleton containing one to ten carbon atoms in which the carbon atoms may be optionally substituted with a substituent selected from the group consisting of: -OH; =O; -OR<sub>5</sub>; -O<sub>2</sub>CR<sub>5</sub>; -SH; -SR<sub>5</sub>; -SO<sub>2</sub>CR<sub>5</sub>; -NH<sub>2</sub>; -NHR<sub>5</sub>; -NH(R<sub>5</sub>)<sub>2</sub>; -NHCOR<sub>5</sub>; NRCOR<sub>5</sub>; -I; -Br; -Cl; -F; -CN; -CO<sub>2</sub>H; -CO<sub>2</sub>R<sub>5</sub>; -CHO; -COR<sub>5</sub>; -CONH<sub>2</sub>; -CONHR<sub>5</sub>; 25 -CON(R<sub>5</sub>)<sub>2</sub>; -COSH; -COSR<sub>5</sub>; -NO<sub>2</sub>; -SO<sub>3</sub>H; -SOR<sub>5</sub>; and -SO<sub>2</sub>R<sub>5</sub>, wherein R<sub>5</sub> is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

R<sub>3</sub> and R<sub>4</sub> are different and are independently selected from the groups consisting of OH,



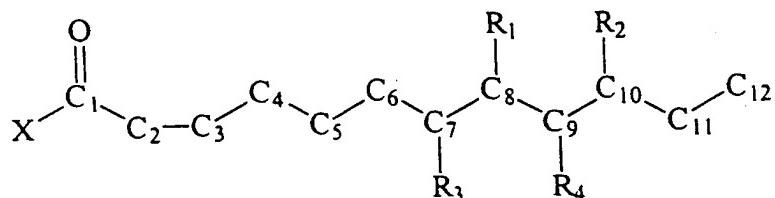
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*Sub A1*

5 3. The compound or physiologically acceptable salt thereof of claim 1 or 2 wherein Z<sup>1</sup> is a linear or branched, saturated or unsaturated one to eight carbon carbonyl optionally substituted with a substituent selected from the group consisting of: NH<sub>2</sub>, NHR, NR<sub>2</sub>, OH, OR, SH, SR, H and CF<sub>3</sub>, wherein R is as defined.

10

4. A compound or a physiologically acceptable salt thereof, wherein the compound has the formula:



wherein:

a single, double or triple bond exists between one or more of: C-2 and C-3; C-3 and C-4; C-4 and C-5; and, C-5 and C-6;

25

X is NH<sub>2</sub>, NHR, NR<sub>2</sub>, OH, OR, SH, SR, H, or CF<sub>3</sub>;

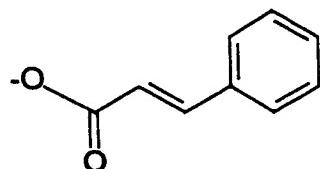
R is a structural fragment having a saturated or unsaturated linear, branched, or cyclic, skeleton containing one to ten carbon atoms in which the carbon atoms may be 30 optionally substituted with a substituent selected from the group consisting of: -OH; =O; -OR<sub>5</sub>; -O<sub>2</sub>CR<sub>5</sub>; -SH; -SR<sub>5</sub>; -SO<sub>2</sub>CR<sub>5</sub>; -NH<sub>2</sub>; -NHR<sub>5</sub>; -NH(R<sub>5</sub>)<sub>2</sub>; -NHCOR<sub>5</sub>; NRCOR<sub>5</sub>; -I; -Br; -Cl; -F; -CN; -CO<sub>2</sub>H; -CO<sub>2</sub>R<sub>5</sub>; -CHO; -COR<sub>5</sub>; -CONH<sub>2</sub>; -CONHR<sub>5</sub>; -CON(R<sub>5</sub>)<sub>2</sub>; -COSH; -COSR<sub>5</sub>; -NO<sub>2</sub>; -SO<sub>3</sub>H; -SOR<sub>5</sub>; and -SO<sub>2</sub>R<sub>5</sub>, wherein R<sub>5</sub> is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

35

R<sub>1</sub> and R<sub>2</sub> are the same or different and are independently H or R;

$R_3$  and  $R_4$  are different and are selected from the group consisting of: OH,

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(a)



and

(b)  $-O-Z-Ar$

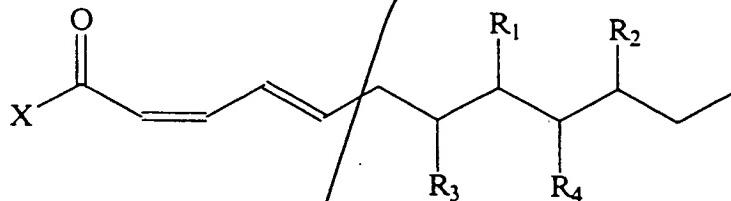
10 wherein, Z is a linear or branched, saturated or unsaturated, one to ten carbon fragment optionally substituted with Y;

Ar is a monocyclic, bicyclic or tricyclic, fully or partially aromatic system containing five or six membered carbocyclic or, oxygen, nitrogen or sulphur containing 15 heterocyclic rings, optionally substituted with R or Y;

Y is selected from the group consisting of: H; =O; -OH; -OR; -O<sub>2</sub>CR; -SH; -SR; -SOCR; -NH<sub>2</sub>; -NHR; -NH(R)<sub>2</sub>; -NHCOR; NRCOR; -I; -Br; -Cl; -F; -CN; -CO<sub>2</sub>H; -CO<sub>2</sub>R; -CHO; -COR; -CONH<sub>2</sub>; -CONHR; -CON(R)<sub>2</sub>; -COSH; -COSR; -NO<sub>2</sub>; -SO<sub>3</sub>H; 20 -SOR; -SO<sub>2</sub>R; and, -O-(epoxide);

with the proviso that one of  $R_3$  and  $R_4$  is (a) or (b), and another of  $R_3$  and  $R_4$  is OH.

5. The compound or physiologically acceptable salt thereof of claim 4 having the structure:



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- 5      12. A compound according to claim 4, wherein the compound is Basiliskamide A substantially free of cellular contaminants.
13. A compound according to claim 4, wherein the compound is Basiliskamide B substantially free of cellular contaminants.
- 10     14. A pharmaceutical composition comprising a compound or physiological salt thereof of any one of claims 1-13, and a pharmaceutically acceptable carrier.
- 15     15. The use of a compound or physiological salt thereof of any one of claims 1-13, as an antifungal agent.
16. The use of a compound or physiological salt thereof of any one of claims 1-3, as an antimycobacterial agent.

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5 and

(b)  $-\text{O}-\text{Z}-\text{Ar}$

wherein,

10  $\text{Z}^1$  and  $\text{Z}$  are linear or branched, saturated or unsaturated, one to ten carbon fragments  
optionally substituted with  $\text{Y}$ ;

15 Ar is a monocyclic, bicyclic or tricyclic, fully or partially aromatic system containing  
five or six membered carbocyclic or, oxygen, nitrogen or sulphur containing  
heterocyclic rings, optionally substituted with  $\text{R}$  or  $\text{Y}$ ;

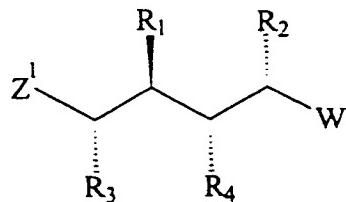
20  $\text{Y}$  is selected from the group consisting of: H; =O; -OH; -OR; - $\text{O}_2\text{CR}$ ; -SH; -SR; -  
 $\text{SOCR}$ ; - $\text{NH}_2$ ; -NHR; - $\text{NH}(\text{R})_2$ ; - $\text{NHCOR}$ ;  $\text{NRCOR}$ ; -I; -Br; -Cl; -F; -CN; - $\text{CO}_2\text{H}$ ; -  
 $\text{CO}_2\text{R}$ ; -CHO; -COR; -CONH<sub>2</sub>; -CONHR; -CON(R)<sub>2</sub>; -COSH; -COSR; -NO<sub>2</sub>; -SO<sub>3</sub>H;  
-SOR; -SO<sub>2</sub>R; and, -O- (epoxide);

25 W is H or R;

with the provisos that when W is H,  $\text{R}_2$  is not H; when  $\text{R}_2$  is CH<sub>3</sub>, W is not n-propyl;  
and, one of  $\text{R}_3$  and  $\text{R}_4$  is (a) or (b) and another of  $\text{R}_3$  and  $\text{R}_4$  is OH.

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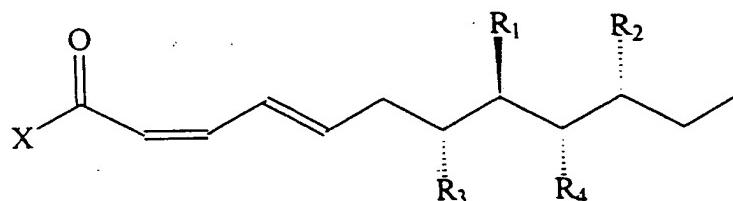
2. The compound or physiologically acceptable salt thereof of claim 1 having the  
stereoisomeric form:



6. The compound or physiologically acceptable salt thereof of claim 4, having the structural and stereoisomeric form:

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1  
0

*Sub  
R2*

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7. The compound or physiological salt thereof of any one of claims 4-6, wherein R<sub>1</sub> and R<sub>2</sub> are independently H or CH<sub>3</sub>.
8. The compound or physiological salt thereof of any one of claims 4-7, wherein R<sub>3</sub> is (a).
9. The compound or physiological salt thereof of any one of claims 4-8, wherein X is NH<sub>2</sub>.
10. The compound or physiological salt thereof of any one of claims 4-9, wherein R<sub>3</sub> at C<sub>7</sub> is (a) and R<sub>3</sub> at C<sub>9</sub> is OH.
11. The compound or physiological salt thereof of any one of claims 4-9, wherein R<sub>3</sub> at C<sub>7</sub> is OH and R<sub>3</sub> at C<sub>9</sub> is (a).